News for and about the Coastal Management Fellows

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FOCUS ON FELLOWS: BECKY WALKER 2003–2005

Fellow Becky Walker and her three younger siblings grew up in York, Pennsylvania, and enjoyed many family vacations that "revolved around activities like backpacking and skiing."

The family's active lifestyle carried over into other parts of Becky's life. She swam competitively throughout high school and college and also participated in synchronized swimming, cross country, and track. Besides sports, studying biology was another life passion that Becky identified early on.

In the 6th grade, Becky knew that she wanted to be a biologist. She even noted this ambition when she wrote a note for her family's time capsule, which was recently unearthed at her grandparents' recent 50th wedding anniversary.

Although Becky already had an inkling of what she wanted to do as an adult, it wasn't until a middle school marine biology trip to Wallops Island, Virginia, that Becky discovered she definitely wanted to be a marine biologist. She decided to go to St. Mary's College in St. Mary's City, Maryland, for undergraduate school because of the marine focus of its biology program.

Becky enjoyed her time at St. Mary's, noting that her



Fellow Becky Walker in Charleston, South Carolina.

favorite aspects of the college are its close proximity to the Chesapeake Bay and the opportunities created by "its small ratio of students to teachers." While at school, Becky became scuba certified, allowing her to conduct research in the Chesapeake for several of her biology classes. The small class size allowed her to ask lots of questions and get personal guidance from her professors.

Becky also traveled to Belize twice while she was at St. Mary's. On the first trip, she assisted two professors with field work related to a research project on chemical defense in sponges and seagrass. On the second trip, she assisted in teaching a two-week tropical marine biology class, helping class members design their research projects. Becky graduated from St. Mary's College of Maryland with a biology degree and an enthusiasm for research.

Going straight from undergraduate to graduate school, Becky chose Nova Southeastern University in Fort Lauderdale, Florida, so she could research dolphins. Her master's thesis focused on dolphin strandings using a database of historic dolphin stranding data.

However, during a coastal zone management internship in graduate school, Becky became more interested in resource management issues, realizing that resources need to be both managed and researched, not just one or the other. This new interest in management led Becky to graduate from Nova



Southeastern University with a dual degree in marine biology and coastal zone management.

As graduation neared, Becky discovered the Coastal Management Fellowship by searching the Internet for fellowship opportunities and from a department e-mail at Nova Southeastern.

With five other projects to choose from at the matching workshop, Becky liked South Carolina's project because it was "more field biology—based than technology—based." She also liked that the project encompassed "a number of goals to teach her about different aspects of resource management."

The goal of Becky's dualagency fellowship project is to make recommendations for developing an overall shellfish management plan for the South Carolina Department of Natural Resources (DNR) and the South Carolina Department of Health and Environmental Control (DHEC), two of the agencies responsible for shellfish in the state.

South Carolina's shellfish resources are abundant, but heavy harvesting has placed increasing pressures on them. The fact that shell replanting has declined because many of the commercial canning and shucking businesses have closed also compounds the problem.

One objective of Becky's project is to analyze the state's capacity to manage shellfish resources in order to develop alternatives to existing regulations where shortfalls may exist. Becky took stock of current policies by analyzing



Becky monitoring shell replanting in Murrells Inlet, South Carolina.

DHEC's Department of Environmental Quality Control and DNR laws and regulations as well as shellfish harvest and management trends in the state. She then compared South Carolina management trends to those of other states in the Atlantic and Gulf regions.

In comparing management trends, she researched shellfish policies in Maryland through Texas, but really focused on North Carolina and Georgia because, like South Carolina, they have intertidal shellfish. Other states' shellfish bed leasing procedures, shellfish harvesting fee structure, public vs. lease acreage, shell replanting/recycling details, and mariculture management practices were also considered.

From her initial policy assessments, Becky has identified some possible shellfish management alternatives for South Carolina including limiting the number of harvesters, limiting daily catch, or increasing replanting on state shellfish grounds.

She is in the process of interviewing many agency staff and shellfishermen to incorporate their expertise and perspectives into the shellfish management plan and to determine the feasibility of various management alternatives. She looks forward to interviewing shellfishermen, the "people who live close to the resource," because it will give her a better sense of how policies are put into practice.

The final shellfish management plan will outline recommendations and a framework for DNR and DHEC to jointly manage the resource. To increase the amount of shells that are recycled in the state, Becky is currently developing an outreach campaign to coincide with the beginning of shellfish season.

At the halfway mark in her fellowship experience, Becky has made significant strides in developing a shellfish management plan for South



Carolina. She has enjoyed the opportunity to work with her two mentors, Bill Anderson with DNR and Steve Moore with South Carolina's Office of Ocean and Coastal Resource Management, and to learn about the interworkings of the two agencies.

She also likes that work outside of her project is encouraged. Becky participates in monthly law enforcement boat runs in Charleston and Beaufort and has participated in state shellfish bed surveys, both of which get her out on the water. Other activities include developing and distributing overboard discharge information for shellfish harvesters in the area and attending public meetings.

For the long-term, Becky would like to continue working in state-level management or perhaps for a nonprofit. She is drawn to education and outreach because it is a versatile resource management tool that communicates with "all different types of people from decision makers to school kids."

A true athlete, Becky is currently training for the LaSalle Bank Chicago Marathon, which she will run in October with her sister and dad. They picked this particular marathon to help raise awareness about multiple myeloma, a cancer of the plasma cell, and to raise funds for research and patient aid.

Becky is thrilled about her recent engagement to her long-time boyfriend, who is in Virginia studying economics, and we are thrilled for her. Congratulations! Although

Becky doesn't quite yet know what she'll be doing after the fellowship, she is certain about one thing—she and her fiancé will finally live in the same city. ♦

For more information about South Carolina's shellfish project, e-mail Becky at WalkerRJ@dhec.sc.gov

FOCUS ON THE CENTER: Alternatives for Coastal Development Web Site

A new product developed by the NOAA Coastal Services Center can assist in your efforts to incorporate smart growth principles into community planning. The Web-based tool allows interested parties to explore three hypothetical development options to compare costs, environmental ramifications, and other impacts to the neighborhood.

This Web site showcases three different development scenarios that illustrate a number of conventional, environmental, and new urbanist concepts at a real tract in coastal Georgia. The 1,100-acre site is typical for the southeastern coast, as it contains wetlands, marshlands, big oak trees, and spectacular views.

The coastal management program in Georgia was a partner in this effort and is taking a lead role in the outreach efforts and distribution of the site. Georgia officials and the Georgia Conservancy, another project partner, will use the information and visualization from the Web site as they work with communities that are struggling with growth issues.

Even though the site focuses on Georgia, the issues and options are not unique. All coastal states can use the information in much the same way Georgia is. ◆

To use this Web site, please visit www.csc.noaa.gov/alternatives/. For more information, please contact Nancy.Cofer-Shabica@noaa.gov.

Alternatives for Coastal Development: One Site, Three Scenarios

What is the cost of development? How do you quantify a development's economic, environmental, and social impacts? While most people understand the benefits of developing with green space, scenic views, and other 'hatural' amenities, achieving the right balance between the natural and built environment can be a difficult task. This Web site illustrates three different development scenarios created for a residential area in coastal Georgia. Economic, environmental, and social indicators are calculated and compared for each scenario. This information will be useful to anyone (developers, citizens, local governments, etc.) interested in applying similar development design components in their communities.

This site features:

- Maps and details of three hypothetical design scenarios
- ▶ Conventional Design: Point Peter Estates
- ▶ Conservation Design: Point Peter Preserve
- ▶ New Urbanist Design: Point Peter Villages
- Comparisons of environmental, economic, and social indicators across the three scenarios
- Selected 3-D views of each scenario
- A detailed project methodology describing process steps, technical steps, and upoful coffware tools.
- Background information and satellite images highlighting useful tools to support decisions on growth and development



Three design scenarios (requires Flash®



FOCUS ON THE FELLOWSHIP: 2004 MATCHING WORKSHOP

Six fellows were matched with six state coastal zone management programs at this year's matching workshop held April 20–23, 2004, in Charleston, South Carolina. The 2004–2006 class of fellows will work on projects ranging from protecting water quality through nonpoint source pollution management to enhancing public access.

Maine



Fellow Vanessa Levesque was matched with the Maine Coastal Program and Maine's Department of Marine Resources to work on a project entitled, "Developing New Methods for Management of Nearshore Embayments in Maine." She completed a master of science in natural resource planning from the University of Vermont in May 2004. Vanessa will be comentored by Kathleen Levden, director of the Maine Coastal Program, and Seth Barker, the oil spill response and geographic information systems (GIS) manager for Maine's Department of Marine Resources. The goal of this



Participants at the recent matching workshop for the Coastal Management Fellowship program in Charleston, South Carolina.

project is to establish a prototype GIS for a variety of uses in Maine's nearshore embayments, including planning, permitting, designation of protected areas, and resolution of user conflicts.

Massachusetts



Fellow Susan Park was matched with the Massachusetts Office of Coastal Zone Management to work on a project entitled, "Rapid Responses to Aquatic Invaders in the Northeast." Susan will complete a Ph.D. in oceanography from the University of Delaware this

summer. Her mentor, Jason Baker, is the invasive species program coordinator for the Massachusetts Office of Coastal Zone Management. The goal of this project is to build on current planning efforts to develop and implement early detection and eradication protocols for aquatic invaders in the Northeast region and to develop nationally transferable guidance and resources about aquatic invaders.

New Hampshire



Fellow Lindsay Anderson was matched with the New Hampshire Coastal Program to



work on a project entitled. "Development of Local Implementation Tools for Coastal Groundwater Sustainability." Lindsay will complete a master of science in water resources management from the University of Wisconsin—Madison this summer. Her mentor, Ted Diers, is the program manager for the New Hampshire Coastal Program. The goal of this project is to inform New Hampshire coastal communities about groundwater resources by developing a user-friendly GIS tool and conducting outreach efforts.

New Jersey



Fellow Rob Freudenberg was matched with the New Jersey Coastal Management Program to work on a project entitled, "New Jersey Coastal Public Access." In May 2004, Rob completed a master of public administration with a focus on environmental science and policy from Columbia University. His mentor, Ruth Ehinger, is the manager of the New Jersey Coastal Management Program. The goals of this project are to continue developing a tracking program for public access conditions in coastal permits, to inspect public access sites, and to develop a public access GIS database and map.

New York



Fellow Amy Filipowicz was matched with the New York State Coastal Management Program to work on a project entitled, "Development of Guidance for Stream Restoration for New York State's Coastal Nonpoint Area." Amy will complete a master of science in marine biology from the College of Charleston this summer. Her mentor, Ken Smith, is the coastal nonpoint coordinator for the New York State Coastal Management Program. The goal of this project is to advance the restoration of water quality in streams impaired by hydrologic and habitat modification and to further develop an overall strategy for the continued improvement of water quality in the riparian habitat.

Oregon



Fellow Laurel Hillman was matched with Oregon's Parks and Recreation Department to work on a project entitled, "Rocky Shore Management." Laurel completed a master of science in marine resource management from Oregon State University in January 2004. Her mentor, Michelle Michaud, is the natural resource program manager for Oregon's Parks and Recreation Department. The goal of this project is to conduct an interagency assessment and make recommendations about management on rocky shores resources.

Congratulations to the 2004–2006 Coastal Management Fellows—we look forward to reading about your projects and experiences over the next two years. ♦

NOAA Coastal Services Center

*Training classes are limited to project partners and NOAA line offices.

July 2004

26-27: Project Design and Evaluation - St. Croix, USVI 26–27: Introduction to ArcGIS 1 – Charleston, South Carolina

28-30: Coastal Applications Using ArcGIS 8.3 –

Charleston, South Carolina

29-30: Project Design and Evaluation - St. Thomas, USVI

August 2004

25-26: Remote Sensing for Spatial Analysts -Charleston, South Carolina

For more information, go to www.csc.noaa.gov/training/.

Upcoming Conferences & Events

JULY

11-14: Watershed 2004 Conference

Location: Dearborn, Michigan

www.wef.org/conferences/watershed 04.jhtml

18-22: National Marine Educators Association Conference

Location: Tampa Bay, Florida

www.floridamarine.org/education/category main.asp?id=2088

SEPTEMBER

12-15: 2nd National Conference on Coastal and Estuarine Habitat Restoration

Location: Seattle, Washington

www.estuaries.org/2ndnationalconference.php

13-15: America's Shoreline: Beach and Ecosystem Restoration in the 21st Century

Location: New Orleans, Louisiana www.asbpa.org/cfp2004mtg.html

20-22: Brownfields 2004

Location: St. Louis, Missouri www.brownfields2004.org

27-30: National Extension Tourism Conference 2004 (NET 2004)

Location: Kissimmee, Florida

http://srdc.msstate.edu/04tourism/index.html

For more information on upcoming events, please visit www.csc.noaa.gov/cms/conferences.html.

